



1900.

THE

ANNUAL REPORTS

OF THE

Medical Officer of Health

AND OF THE

Sanitary Inspector

FOR

The Paignton Urban District.

PAIGNTON :

H. P. LUSCOMBE, PRINTER, PALACE AVENUE,

THE ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

For the year ended 31st December, 1900.

*To the Chairman and Councillors of the Paignton
Urban District Council.*

GENTLEMEN,

There has been some little delay in presenting this my tenth Annual Report, caused in a measure by an alteration in the forms required by the Local Government Board, and also to give statistics for the last ten years.

The figures relating to this year are based upon an estimated population to the middle of the year of 8150. As the census will soon be taken, any error as to the number of the population will easily be rectified, but I think I have rather under, than over estimated them, and in that case the death and birth rates will be reduced.

There were during the year 141 deaths registered, but Deaths. after deducting 11, the number of non-residents, whose deaths were registered, and adding 3, the number of residents who died outside the district, there were 133 deaths, giving a death rate of 16·3 per 1000 per annum.

The following table shews the number of deaths at the various ages.

Under 1 year of age	...	...	...	...	21
1 year and under 5	...	...	...	...	6
5 years and under 15	...	...	...	...	3
15 years and under 25	...	...	...	...	5
25 years and under 65	...	...	...	...	31
65 years and upwards	...	...	...	...	67

The following is a summary of the causes of death registered during the year :—

TABLE IV.

PAIGNTON DISTRICT.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1900.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN PUBLIC INSTITU- TIONS.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	
Small-pox								
Measles	2	1	1					
Scarlet Fever								
Whooping-cough								
Diphtheria and mem- branous croup								
Croup								
Fever { Typhus	3				2	1*		
Enteric								
Other continued								
Epidemic influenza	2					1	1	
Cholera								
Plague								
Diarrhoea	6	6						
Enteritis								
Puerperal fever								
Erysipelas								
Other septic diseases	2	1				1		
Phthisis	6				1	4	1	
Other tubercular dis- eases	4		2	2				
Cancer, malignant di- sease	8					3	5	
Bronchitis	10	2				1	7	
Pneumonia	6	3					3	
Pleurisy								
Other diseases of Res- piratory organs	1	1						
Alcoholism								
Cirrhosis of liver }	3					3		
Venereal diseases								
Premature birth	4	4						
Diseases and accidents of parturition								
Heart diseases	27				1	6	20	
Accidents	1			1				
Suicides								
All other causes	48	3	3		1	11	30	
All causes	133	21	6	3	5	31	67	

* This case was 63 years of age.

The deaths for 1900 were exceptionally heavy—133; but 67 (more than half the number) were over 65 years of age, and the following figures may interest you. Of the 67 deaths, 26 were over 70, 15 were over 80, and 2 were over 90 years of age.

The infant mortality was 21, and measured by the proportion of under 1 year of age to the number of births registered is 126 per 1000, an increase on last year. The average for the last ten years is 14.3 and 89.6 per 1000 births registered.

Infant
Mortality.

Taking the figures from 1890 to 1899, the average number of deaths was 96.1, giving a gross death rate of 13.1, but after deducting the non-residents who died, and adding the number of residents who died outside the district, the total net average number of deaths were 93.9 per annum, with an average net death rate of 12.8 per 1000 per annum. This I consider is a very satisfactory record.

Ten Years.

The average for ten years of deaths occurring in Paignton of non-residents is 5.4, and that of residents dying outside the district is 3.2. As you are aware the workhouse is outside the Paignton district, at Totnes, and so that the figures may be as accurate as possible I have carefully gone through the Register of deaths of both Paignton and Totnes, for the last 10 years. See Table I.

There were 166 births registered during 1900, boys 86, girls 80, giving a birth rate of 20.3 per 1000 per annum. The average number of births for the last 10 years was 162, giving an average birth rate of 22.2 per 1000 per annum. Our birth rate does not keep up to the average, but as I have before pointed out, I consider this is accounted for by the fact that a great proportion of the new residents consists of people in advanced life.

Births.

You will notice that I have estimated the increase of the population during the last 10 years as 1420, of this the natural increase, excess of births over deaths, is 683; leaving 737 as the number of new residents. Taking the number of houses occupied in 1890 as 1350, and adding 450, the number of new houses occupied during the last ten years gives 1800, and allowing 5 persons to each house the population of Paignton would be 9000. If every house in Paignton were occupied, possibly this would be about correct, but for the purpose of estimating, both death and birth rates, I have assumed a less number so that any error may be to the credit side of the town. See Table II.

TABLE 1.

NAME OF DISTRICT—PAIGNTON.

YEAR.	Population estimated to middle of each year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		DEATHS IN PUBLIC INSTITUTIONS.	Deaths of Non-residents registered in District.	Deaths of Residents registered beyond District.	DEATHS AT ALL AGES. NETT.	
		Number.	Rate*	Number.	Rate per 1,000 Births registered.	Number.	Rate*				Number.	Rate*
1	2	3	4	5	6	7	8	9	10	11	12	13
1890	6730	148	22	15	101	76	11·2	No General Hospital or Workhouse.	7	3	72	10·7
1891	6840	179	25·5	16	101	85	12·1		2	2	85	12·1
1892	7060	149	21·1	11	73·8	100	14·1		9	4	95	13·3
1893	7120	158	22·1	13	82·8	113	15·8		10	3	106	14·9
1894	7230	170	23·4	18	105·8	94	13		1	4	97	13·4
1895	7350	166	22·5	17	102·4	105	14·2		5	3	103	14
1896	7420	166	22·2	11	66·4	106	14·2		5	3	104	14
1897	7500	180	24·2	10	55·5	89	11·8		3	2	88	11·5
1898	7700	161	20·9	19	118	95	12·3		4	4	95	12·3
1899	7900	145	18·3	13	89·6	98	12·4		8	4	94	11·9
Averages for years 1890-1899.	7283	162	22·2	14·3	89·6	96·1	13·1		5·4	3·2	93·9	12·8
1900	8150	166	20·3	21	126	141	17·1		11	3	133	16·3

* Rates calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in column 12 are the number in column 7, corrected by the subtraction of the number in column 10 and the addition of the number in column 11.

By the term “Non-residents” is meant persons brought into the district on account of illness and dying there; and by the term “Residents” is meant persons who have been taken out of the district on account of illness, and have died elsewhere.

Area of District in acres (exclusive of area covered by water)	5,177	} At Census of 1891.
Total population at all ages	...	...	6,785
Number of inhabited houses	...	...	1,350
Average number of persons per house	...	...	5

TABLE II.
NAME OF DISTRICT—PAIGNTON.

NAMES OF LOCALITIES.		1 _____				2 _____				3 _____			
YEAR.		Population esti- mated to middle of each Year.	Births regis- tered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births regis- tered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each Year.	Births regis- tered.	Deaths at all Ages.	Deaths under 1 year.
		<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1890	...	6730	148	72	15								
1891	...	6840	179	85	16								
1892	...	7060	149	95	11								
1893	...	7100	158	106	13								
1894	...	7230	170	97	18								
1895	...	7350	166	103	17								
1896	...	7420	166	104	11								
1897	...	7500	180	88	10								
1898	...	7700	161	95	19								
1899	...	7900	145	94	13								
Averages of Years 1890 to 1899.		7283	162	93·9	14·3								
1900	...	8150	166	133	21								

NOTES.—(a) The separate localities adopted for this table should be areas of which the populations are obtainable from the Census returns, such as wards, parishes or groups of parishes, or registration sub-districts. Block 1 may, if desired, be used for the whole district: and blocks 2, 3, &c., for the several localities. In small districts without recognised divisions of known population this Table need not be filled up.

(b) Deaths of residents occurring beyond the district are to be included in sub-columns *c* of this Table, and those of non-residents registered in the district excluded. (See note on Table I. as to meaning of terms “resident” and “non-resident.”)

(c) Deaths of residents occurring in public institutions are to be allotted to the respective localities, according to addresses of the deceased.

Zymotic
Disease

The number of notifications received during 1900 was the smallest since the Notification Act was adopted, viz. : 14, of these—

2 were Scarlet Fever
6 were Enteric Fever
1 was Diphtheria
5 were Erysipelas

—
14

TABLE III.

PAIGNTON DISTRICT.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1900.

Notifiable Disease.	Cases Notified in Whole District.							No. of Cases Re- moved to Hospital.
	At all Ages.	All Ages—Years.						
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards	
Small Pox								
Cholera								
Diphtheria	1					1		1
Membranous croup								
Erysipelas	5					5		
Scarlet Fever	2			2				1
Typhus Fever								
Enteric Fever	6			1	3	2		4
Relapsing Fever ...								
Continued Fever ...								
Puerperal Fever ...								
Plague								
Totals	14			3	3	8		6

The number of deaths registered as due to zymotic disease, were chiefly non-notifiable, and were as follows, viz :

Diarrhœa 6
Measles 2

—
8

Notifiable Enteric Fever 3

—
Total 11

giving a zymotic death rate of 1·3 per 1000 per annum.

There were 6 deaths registered as due to this disease, a Phthisis decrease on last year, giving a death rate of 0.7 per 1000 per annum.

In my report of 1898 I went to some length into this subject, when I drew your attention to the fact that this is proved to be one of the preventable diseases, and that I may impress you with the fearful waste of human life, I ask you to study the following figures. During the last 10 years 71 deaths were registered as due to Phthisis, and from all the following diseases combined, viz. :

Scarlet Fever	Enteric Fever	Erysipelas	} only 44
Measles	Diarrhœa	Croup	
Whooping Cough	Diphtheria		

Again referring to my report of 1898, I pointed out the necessity of seeing that the bye-laws were strictly carried out with regard to subsoil drainage of damp sites, provision of ample air space about the dwellings, concreting the ground under the surface of houses, and efficient damp courses. During the past year it has been my duty to reiterate these recommendations, more especially as regards air space behind the dwelling house, but with little profit. I am perfectly conscious that you look upon me as being a tiresome faddist on these questions, and my protests are frequently listened to with scant patience. That I am not alone in my views I beg to submit the following extracts and recommendations from a special report on the prevention of consumption and its allied diseases by Dr. Newman, Medical Officer of Health for Finsbury, issued to the Vestry of Clerkenwell. He says : “It is imperative that all sanitary authorities should put in force the manifold powers which they now possess for improving the public health, and especially in the direction of providing better ventilation and access of light in all dwellings and workshops, and in all places of public assembly.” That “This disease has the faculty of clinging to the dwelling-house itself apart from its being conveyed from person to person by the dried sputum in the form of dust ;” and he recommends “that all Local Sanitary authorities should undertake free of charge, the disinfection of houses in which a tuberculous patient has resided, exactly as after other infectious diseases, together with the bedding, clothing, and other articles capable of retaining infection. Washing or spraying the walls with some efficacious disinfectant (formalin, chinosol, etc.) is more desirable than mere sulphur fumigation. The following is a copy of a circular which might be sent immediately the death return is received :—

THE ADDRESS OF THE LOCAL AUTHORITY,

(DATE.)

DEAR SIR, OR MADAM,

In connection with the death from Consumption (Phthisis) registered as having occurred at No. _____, allow me to draw your attention to the following important facts :—

Consumption is a highly infectious disease and is chiefly communicated from one person to another by inhaling the dust in the room occupied or previously occupied by the patient, hence it is most important that the house should be thoroughly cleansed and all traces of dust removed, wet cloths being used for this purpose. I beg to advise you that the following works are necessary in order to prevent the risk of similar cases arising in the house, namely :—

1st. Strip the wall-paper off the walls and burn the stripped off wall-paper in the fire place of the same room. N.B.—The chief danger is from dust hence all articles should be thoroughly wetted before cleansing them. A supply of disinfectant for mixing with the water can be obtained free of cost at the above office, but a disinfectant is not essential if everything is thoroughly wetted.

2nd. Thoroughly wash the floors, walls, skirting boards, ceiling, and all woodwork, including ledges over door, furniture and picture frames in the room. Roll up rugs, carpets and the like, and spread them out of doors in the sun for a few hours, afterwards they may be thoroughly beaten.

3rd. Bed and body linen (including pillows) and other washable articles should be boiled in water for ten minutes. If inconvenient to wash these at once, or if they have become dry, they should be first steeped in a tub or bath containing disinfectant for at least two hours. Woollen articles may be soaked in the same disinfectant.

4th. Thoroughly ventilate the room by keeping the windows wide open for several days. Sunlight and fresh air are excellent disinfectants.

We shall be glad to do what we can to assist you in carrying out the above works.

Yours obediently,

Medical Officer of Health.

This plan is preferable to a visit at the house of the deceased before the burial which might be apt to give annoyance or pain to the relatives. Postponing all directions until after the burial is found to be unworkable. Methods of disinfection, more or less similar to the above have been adopted in the following London Districts, namely, Plumstead, Lambeth, Mile End, St. Mary's (Newington), Marylebone, Battersea, Whitechapel, St. Luke's, etc."

With regard to those recommendations I suggest that an arrangement be made with the registrar of deaths, that he send at once notice to the Council immediately a death is registered from phthisis, and that he be paid the usual fee for doing so. Further, I would ask to have copies printed of this circular letter so that we may send one to every house when such a death has taken place.

Now comes the question as to what the Paignton Sanitary Authority is doing towards the prevention of this, the white man's scourge.

Never had any Sanitary Authority a better opportunity of making a model town than exists in Paignton, and yet the opportunity is allowed to slip by.

On the one hand, you subscribe to the funds of the Society for the Prevention of Consumption, a very proper thing to do, but even that Society is to my mind making a great mistake in using so much of its energy, simply in the provision of Sanatoria for the treatment of cases of Consumption, and doing so little to prevent the making of these cases, by arousing the public interest to the condition of their home surroundings, and more especially by not drawing the attention of the Ratepayers to the fact that the various Public Health Acts are in many cases practically a dead letter. It is by the faithful and fearless administration of the almost unlimited powers under the Public Health Act, Workshops and Factory Acts, the regulation of the Milk and Meat supply, that we must look to stop this white man's scourge.

Then again, you have expended large sums of public money on the provision of Recreation Grounds, airspace for the Ratepayers, but what has been your policy with regard to the administration of the Byelaws? You are allowing in the business parts of Paignton the creation of the worst features of old towns, by permitting property owners to cover up the building sites with buildings, and not enforcing the provision of the very limited air space required by the Bye-laws. This covering up of back gardens, by buildings, is on the increase, and that, notwithstanding the repeated protests of your Medical Officer of Health. True at present, as I have said, this is confined chiefly to the centre of the town, but it will spread like a disease unless it be put a stop to. Your decisions on this matter are so opposed to the policy of providing public pleasure grounds, that I feel I must draw your special attention to its inconsistency. Paignton, with its 5000 acres, has plenty of room to spread out, and there is no reason in the world why you should permit property owners to create a crowded area.

A large amount of building is going on in Paignton, but sufficient supervision is not exercised. To remedy this I advised that a Buildings Inspector be appointed, not necessarily that a new office should be created, but the duty should be assigned to someone, and reports regularly submitted. I have brought this before you previously but nothing has been done.

- Drainage.** This question requires attention. The occasional flooding of Dartmouth Road is not entirely remedied, and at times of heavy rain the sewer in the Torbay Road is surcharged, and flooding is caused at the junction of the Torbay and Hyde Roads where the sewer from Southfield joins the main sewer. Paignton has grown considerably since 1880 when the present system of drainage was carried out, but preliminary to the execution of any new works a most careful survey should be made of the condition of our present sewers. From personal observation I know that the outfall is surcharged after a very moderate shower, at low water and spring tides. Whether the outfall should be simply duplicated, or a separate outfall provided for the high levels, is a subject for the decision of an engineer, but something should be done very soon. The ventilation of the sewers, too, is another pressing need. Again from personal observation, I know that sewer gas is forced through the water seal of many of the interceptor traps, and this could probably be remedied by placing 6in. ventilators wherever practicable, near the top of the manholes. In the low-lying parts of the town, the flushing of the sewers, carried out in the early part of last summer proved of great benefit and might be repeated. Automatic flushing is not applicable to our sewers, as they are subject to tidal influence.
- Scavenging.** This is done by the Council, and on the whole satisfactorily, but the covers for the scavenge carts asked for to prevent the dust being blown about the streets have not been provided. This is such an inexpensive improvement that one can but wonder at the delay.
- Water.** The Moorland water scheme is being pushed forward by the Council as much as possible.
- Slaughter-houses, Drains, Bake houses, Milk-shops, and Workshops.** During the year many visits have been made to these, independent of the routine visits of the Sanitary Inspector, who will report more fully upon these matters.
- Isolation.** The Isolation Hospital has again proved most useful in providing for first cases, and so prevented infectious disease from getting any footing.
- Byelaws under 1890 Amendment Act.** In my last annual report I stated that a sub-committee had been appointed to bring up proposed new bye-laws under the 1890 Amendment Act, and also under the Paignton Improvement Act, and that the committee was working upon them. The services of the whole of the officials were requisitioned and many meetings were held. A fairly satisfactory set of byelaws was formulated and printed, and just when one expected some result from the time expended

some wise or otherwise member proposed that before a copy was sent to the Local Government Board for approval the proposed byelaws should be submitted to a committee of Architects and Builders of the town. Much to my chagrin this curious, nay absurd, proposal, found a seconder, and after discussion was duly carried and acted upon. As was to be expected this committee of interested parties naturally reported that they did not consider the byelaws necessary, and as a consequence they were abandoned. Now, gentlemen, I differ entirely from this report of the architects and builders, and if Paignton is to keep its position as a first class health resort and not to sink into insignificance you will at once proceed to the making of these byelaws and go even further and amend your present byelaws under the 1875 Act in the direction of providing a much greater air space at the back of dwelling houses than is at present required, and bring them more into accord with the great advance that has been made in sanitary science

The following is the Report of Mr. Revell, the Vaccin- Vaccination Officer :—

Births registered in 1900 in Paignton 166.

Successfully vaccinated	120
Died unvaccinated	13
Postponed by Medical Certificate	4
Removed from Paignton	5
Conscientious objectors	0
Unvaccinated	24
	<hr/>
	166

All the 24 unvaccinated cases are under six months old.

Mr. Crathorn, the Sanitary Inspector, will give full details of the routine work done during the year.

I am, Gentlemen,

Your obedient Servant,

CHAS. W. VICKERS, D.H.P., London,

Medical Officer of Health

March 4th, 1901.

THE ANNUAL REPORT
OF
THE SANITARY INSPECTOR,

For the Year ended December 31st, 1900.

*To the Chairman and Councillors of the Paignton Urban
District Council.*

GENTLEMEN,

Private
Drains.

I have carefully examined and tested the drains of all new houses erected during the year, and the builders and owners of property are having in many cases inspection chambers put in at the point of the connection near the interceptor.

It is desirable that this should be done in all cases, and the Council would do well to make an effort to get this done. I know that it would be more expensive for the builders of small cottage property, but the great advantage derived would soon pay the increased outlay, as it is in this class of property especially where we find the largest number of chokages in the drains.

Many drains have been tested with the smoke and water tests, several of which were found defective, and in all cases when so found have been taken up and relaid, or thoroughly repaired. In some cases old stone drains or land drain pipes were found, these of course at some of the oldest properties, in all cases of this kind they were taken up and proper glazed stoneware pipes substituted. Many defective Mason's, D, and Bell traps were taken up and replaced by gullies and interceptor traps. In several cases I have discovered that drains have been interfered with without the knowledge of the Council, and left in an imperfect state, and I would again request that byelaws under the Public Health Act Amendment Act, 1890, be made so as to prevent drains being repaired and covered up without notice to the authority.

Old pan container and long hopper closets when found defective have been taken out and replaced by closets of more modern type of the washdown pattern. All defective soil pipes where found in the wall have been condemned and new 4in. iron pipes carried outside the building, and where outside and found defective have been repaired, this has been the means in many instances of doing away with 2in. vent pipes and substituting the same with 4in. I am still occasionally finding overflow of rain water cisterns and rain water pipes carried direct into the drain, which is always very objectionable and should in every case be cut off from the drains and carried over a gully, or emptied upon the surface of the ground. Water Closets, etc

The collection of house refuse is carried on with few complaints and the same is being used for filling up the recreation ground, but as this is nearly filled up it will be necessary in the near future to find a fresh tipping ground. Last summer I received several complaints that the dust and paper was blown about the streets from the dust carts, and again ask that coverings be provided. Scavenging.

The owners of a number of old houses have applied to have the town water laid on to their premises and in all cases the applications were granted. One sample of well water has been analysed and found contaminated. All occupiers of houses are requested to have the water cisterns properly cleaned out, and also to see that the same are securely covered so as to prevent the contamination of the water. Water.

All houses in which cases of infectious disease have been notified have been visited by me. Disinfectants have been provided where necessary or applied for, the houses disinfected and the drains tested, and if found defective notice has been served upon the owner or occupier to do the necessary work required. Infectious Disease.

Several houses have also been disinfected after cases of Phthisis, and in all cases where considered necessary to strip and clean the rooms notices have been served upon the owner to carry out the work.

The Dairies and Milk shops have been periodically visited and inspected, and the same are kept in fairly clean condition. Some of the Cow houses are very dark and dilapidated, and means should be taken to put them in better condition. Dairies, Cowhouses, etc.

The Register has been revised during the year and there are now 29 registered persons. The new Rules and Regulations of the Local Government Board have been printed and a copy has been supplied to every person registered.

- Bakehouses** I have visited all the Bakehouses several times during the year, and on the whole there is no cause of complaint as to cleanliness.
- Slaughter-houses.** Periodical visits have been made to the slaughter houses, and I am sorry to report that in some cases the premises are not kept in such a condition as they should be, and if an improvement be not made I shall feel compelled to ask the Council to take proceedings to suspend or take away the licenses.
- Foods and Drugs** Copies of the Foods and Drugs Act, 1899, amending the Act of 1875 and the Margarine Act 1887, have been obtained, and a copy has been supplied as far as I know to all shopkeepers interested. The samples of milk taken have all been certified by the County Analyst as genuine.
- New Houses** All the drains and sanitary arrangements of new houses have been examined and tested before occupation. There is a small decrease in the number of new houses as compared with last year.
- Notices.** Notices for the abatement of nuisances, offensive accumulations, removal of animals, and all other cases considered necessary, have been served. In several cases it was found necessary to apply to the Council for legal notices, and in one case application had to be made to the Magistrates for a summons to abate a nuisance, and they made an order to abate the same, but would not allow the Council's expenses. One cottage had to be closed as unfit for occupation; the owner having put it in good order and repair it has since been occupied.

I herein beg to submit for your information a tabulated report of some of the work carried out during the year.

Complaints received and attended to...	...	15
Houses inspected	... ..	506
Notices preliminary	.. ...	17
Notices legal	... ..	8
Drains tested	... ..	50
Drains choked	... ..	15
Drains defective repaired	... ..	28
Drains taken up and relaid	... ..	18
Drains, new system	... ..	17
Inspection chambers	... ..	9
Interceptor where drains not trapped	... ..	16
Interceptor in place of defective Mason's	... ..	13
Gullies in place of D and Bell traps	... ..	44
Washdown Closets in place of pan containers		13
Washdown Closets in place of long hopper	...	25

Water waste preventors fitted	...	...	18
Soil pipes, defective, taken out of wall	...	...	16
Soil pipes repaired	...	...	6
Rain and overflow pipes taken out of drain...	...	...	13
Ashpits repaired...	...	...	18
Galvanised bins provided	...	...	10
Offensive accumulations removed	...	...	4
Animals removed	...	...	1
Water Closets built	...	...	9
Town water laid on to old premises	...	...	12
Infectious cases visited...	..	...	14
Infectious cases removed to Hospital...	...	...	6
Houses disinfected	...	...	7
Houses cleansed...	...	...	2
Cesspools closed	...	...	2
Water samples taken	..	...	1
Water contaminated	...	...	1
Water cisterns covered...	..	...
Cowhouses cleaned	...	...	3
Bakehouses cleaned	...	...	1
New houses tested	...	...	51

I remain, gentlemen,

Your obedient Servant,

J. CRATHORN, C.S.I.,

Sanitary Inspector.

March 4th, 1901.

